and

generating correlation values by performing a Hadamard transform on the permuted data.

7. The method of claim **6** further comprising:

computing the squared magnitudes of the generated correlation values; and

permuting the squared magnitudes of the generated correlation values to determine the first sequence of the received signal.

8. In a multi-sequence spread spectrum signal detector, a block correlator apparatus comprising:

a receiver for receiving a signal comprising a first transmitted sequence and a second transmitted sequence;

coupled to the receiver, a multiplier for multiplying the received signal by a replica of the second transmitted sequence to generate a stripped signal; and

coupled to the multiplier, a block correlator for generating correlation values as a function of the stripped signal and a replica of the first transmitted sequence at a plurality of offsets, wherein the block correlator generates correlation values as a function of a Hadamard transformation.

9. The apparatus of claim **8** further comprising:

coupled to the block correlator and the multiplier, a permuter for permuting the stripped signal prior to block correlation in the Hadamard transformation.

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